

CLAIMS

Please amend claims 1, 3, 5, 7, and 8 as follows:

- 1 1. (Currently amended) A processing system for performing addition and subtraction
- 2 within limits upon a shared value comprising:
- 3 means for performing a first uninterruptible operation upon the shared value
- 4 stored in an affected reservation location, the first uninterruptible operation using an
- 5 operand;
- 6 means for comparing a resulting value of the first uninterruptible operation stored
- 7 in the affected reservation location to limit values stored in limit locations;
- 8 means for performing a second uninterruptible operation to restore the affected
- 9 reservation location if the resulting value of the first uninterruptible operation is not
- 10 within the limit values in the limit locations;
- 11 means for reporting a failure if the resulting value of the first uninterruptible
- 12 operation is not within the limit values in the limit locations;
- 13 means for performing a third uninterruptible operation to update an actual value
- 14 location if the resulting value of the first uninterruptible operation is within the limit
- 15 values in the limit locations;
- 16 means for performing a fourth uninterruptible operation to update an unaffected
- 17 reservation location [register] if the resulting value of the first uninterruptible operation is
- 18 within the limit values in the limit locations; and
- 19 means for reporting a success if the resulting value of the first uninterruptible
- 20 operation is within the limit values in the limit locations.

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- 1 2. (Previously presented) The processing system of claim 1 wherein the first, second,
- 2 third, and fourth uninterruptible operations are LOCK XADD operations.

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1 3. (Currently amended) A processing system for performing addition and subtraction

2 within limits upon a shared value comprising:

3 means for receiving an operand;

4 means for performing a first uninterruptible operation upon the shared
5 value stored in an affected reservation location, the first uninterruptible operation using
6 the operand;

7 means for comparing a resulting value of the first uninterruptible operation
8 stored in the affected reservation location to limit values stored in limit locations;

9 means for performing a second uninterruptible operation to restore the
10 affected reservation location if the resulting value of the first uninterruptible operation is
11 not within the limit values in the limit locations;

12 means for and reporting a failure if the resulting value of the first
13 uninterruptible operation is not within the limit values in the limit locations;

14 means for performing a third uninterruptible operation to update an actual
15 value location if the resulting value of the first uninterruptible operation is within the
16 limit values in the limit locations;

17 means for performing a fourth uninterruptible operation to update an
18 unaffected reservation location [register] if the resulting value of the first uninterruptible
19 operation is within the limit values in the limit locations; and

20 means for reporting a success if the resulting value of the first
21 uninterruptible operation is within the limit values in the limit locations.

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1 4. (Previously presented) The processing system of claim 3 wherein the first, second,
2 third, and fourth uninterruptible operations are LOCK XADD operations.

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1 5. (Currently amended) A method for performing addition and subtraction within limits
2 upon a shared value comprising the steps of:

3 first, performing a first uninterruptible operation upon the shared value
4 stored in an affected reservation location, the first uninterruptible operation using an
5 operand;

6 second, comparing a resulting value of the first uninterruptible operation
7 stored in the affected reservation location to limit values stored in limit locations;

8 third, performing a second uninterruptible operation to restore the affected
9 reservation location;

10 fourth, reporting a failure if the resulting value is not within the limit
11 values in the limit locations;

12 fifth, performing a third uninterruptible operation to update an actual value
13 location if the resulting value is within the limit values in the limit locations;

14 sixth, performing a fourth uninterruptible operation to update an
15 unaffected reservation location [register] if the resulting value is within the limit values in
16 the limit locations; and

17 seventh, reporting a success if the resulting value is within the limit values
18 in the limit locations.

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1 6. (Previously presented) The method of claim 5 wherein the first, second, third, and
2 fourth uninterruptible operations are LOCK XADD operations.

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1 7. (Currently amended) A computer readable medium containing computer readable code
2 comprising:

3 a code segment for performing a first uninterruptible operation upon the
4 shared value stored in an affected reservation location, the first uninterruptible operation
5 using an operand;

6 a code segment for comparing a resulting value of the first uninterruptible
7 operation stored in the affected reservation location to limit values stored in limit
8 locations;

9 a code segment for performing a second uninterruptible operation to
10 restore the affected reservation location;

11 a code segment for reporting a failure if the resulting value is not within
12 the limit values in the limit locations;

13 a code segment for performing a third uninterruptible operation to update
14 an actual value location if the resulting value is within the limit values in the limit
15 locations;

16 a code segment for performing a fourth uninterruptible operation to update
17 an unaffected reservation location [register] if the resulting value is within the limit
18 values in the limit locations; and

19 a code segment for reporting a success if the resulting value is within the
20 limit values in the limit locations.

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1 8. (Currently amended) A processing system for performing addition and
2 subtraction within limits upon a shared value comprising:
3 a processor, the processor
4 performing a first uninterruptible operation upon the shared value
5 stored in an affected reservation location, the first uninterruptible operation using an
6 operand;
7 comparing a resulting value of the first uninterruptible operation
8 stored in the affected reservation location to limit values stored in limit locations;
9 performing a second uninterruptible operation to restore the
10 affected reservation location if the resulting value of the first uninterruptible operation is
11 not within the limit values in the limit locations;
12 reporting a failure if the resulting value of the first uninterruptible
13 operation is not within the limit values in the limit locations;
14 performing a third uninterruptible operation to update an actual
15 value location if the resulting value of the first uninterruptible operation is within the
16 limit values in the limit locations;
17 performing a fourth uninterruptible operation to update an
18 unaffected reservation location [register] if the resulting value of the first uninterruptible
19 operation is within the limit values in the limit locations; and
20 reporting a success if the resulting value of the first uninterruptible
21 operation is within the limit values in the limit locations.